12-4-01 Official

D1

17. (amended) An arrangement of a sensor and optics comprising:

an array of photosensors; and

a lens system for providing a focus for imaging by said array, said lens system having a characteristic of introducing curvilinear distortion of an image to said array;

said array having a shape to achieve compensation of said curvilinear distortion, including having arcuate edges to establish said compensation;

wherein said photosensors are disposed in a plurality of columns and a plurality of rows and wherein said photosensors combine to define an optical axis for said array, adjacent columns being spaced apart by an arcuate boundary, with curvatures of said arcuate boundaries increasing with departure from said optical axis.

D2

19. (amended) The arrangement of claim 17 wherein adjacent rows are spaced apart by second arcuate boundaries, with curvature of said second arcuate boundaries increasing with departure from said optical axis.

D3

3 20. (amended) An arrangement of a sensor and optics comprising:

a two-dimensional array of photosensors; and

a lens system for providing a focus for imaging by said array, said lens system having a characteristic of optically introducing curvilinear distortion of an image to said array;

said array having a curvilinear shape to achieve compensation of said curvilinear distortion, including having a plurality of arcuate outer edges to establish said compensation, said photosensors being varied dimensionally to define said curvilinear shape, said curvilinear shape being aligned relative to said curvilinear distortion to introduce a physical distortion that offsets said optically introduced curvilinear distortion;

wherein said photosensors are disposed in a plurality of columns and a plurality of rows and wherein said photosensors combine to define an optical axis for said array, adjacent columns being spaced apart by an arcuate boundary, with curvatures of said arcuate boundaries increasing with departure from said optical axis.

D4

4 22. (amended) The arrangement of claim 3 20 wherein adjacent rows are spaced apart by second arcuate boundaries, with curvature of said second arcuate boundaries increasing with departure from said optical axis.